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ABSTRACT

Career Education poses a challenge for in-service education and requires management decision making from all the discipline areas and teaching levels. The major theme of this paper is that sound planning and management of a systematic in-service delivery system is basic to implementing career education. A planning format is presented for use in determining the strategy of the in-service effort, the structure of the program to be presented, and the instructional system which supports the effort. The second theme of the paper is that any in-service program dealing with a major change must consider that each school system generally has a large turnover of personnel, who may have little or no knowledge of career education or insight into its operational meaning. A third theme concerns the need to create an indepth understanding of the nature of career education and how it can add meaning and relevance to instruction. Steps in the strategy for in-service education are outlined, with a strong recommendation that the school district assume the cost of the professional retraining for the major policy change inherent in the career education concept. A case study of a preservice career education module is presented as a model for the design of an in-service program. Appended are instruments to assist district personnel in evaluating materials for career education and an attitudes survey to assess beliefs toward career education. (Author/VT)

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CAREER EDUCATION: IN-SERVICE TEACHER EDUCATION

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CLEARINGHOUSE ON VOCATIONAL
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January 9, 1974

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CAREER EDUCATION:

IN-SERVICE TEACHER EDUCATION

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1973

FOREWORD

Career education as a visible and viable theory of educational reform came on the American scene as an identifiable entity circa 1971 and since then has received much attention not only in the professional press, but more importantly in the public press. Proposed as a major integrative thread for the entire K-12 curriculum, career education is an attempt at curriculum reform of a magnitude greater than most such efforts: (1) embodying the community and the world of work as a base; (2) resting on the giant, free enterprise system of the U.S.A.; (3) requiring a professional movement of equal force—everyone in a school district must understand it and make it operational if it is to be implemented; (4) requiring that all teachers, counselors, administrators, and support personnel know their practicing role in light of changed goals; and (5) involving the use of new materials constantly being developed, tested and adopted.

In short, career education, if it is to succeed, poses a very large challenge for in-service education. Unlike some past educational innovations, it impinges not on one discipline area, one level of teaching, one method, or one scheduling adaptation; rather it impinges on every pupil at every grade, and hence upon everyone and everything in the district and in the community. A few workshops and in-service days will support some types of educational reform but they are inconsequential when compared to what we face in career education. What is needed is a management effort characteristic of the best personnel training efforts, which evidences input into decision-making from all the groups involved.

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INTRODUCTION

If career education is the major educational reform it appears to be, it will impact upon every subject, every grade, and every pupil in the district. As such, it poses an in-service problem for the district; a problem with two basic components which the management must consider. First, those charged with the curriculum development programs must decide what is to be taught, and outline the competencies which are to be required of students in every aspect of career education. The second management problem rests in ensuring that every administrator, teacher, counselor, and support person can understand career education as a concept, relate it to the world of work as it exists in a technological society, and deliver it in terms of the learning experiences needed by every student.

One can hardly travel the length and breadth of a state such as Michigan, or visit various communities around the country, or attend national professional meetings without hearing that various districts have been engaged in career education workshops, conferences, and other in-service meetings. It is evident from these activities that there is a good deal of energy devoted to helping the personnel in these districts understand career education and developing implementation techniques. It appears that some districts are undertaking "one-shot" in-service activities, while others are planning and conducting sequential activities. But generally each is going its separate way and few are reporting in detail what they are doing.

There is a substantial body of literature now in the professional journals and in the public press about career education—its purposes, goals, and presumed outcomes. Supporting this is a body of literature, again of a substantial nature, which is related to selected aspects of career education such as career development, and the role of the social studies. There is, however, very little literature available which describes and details in-service education programs regarding the strategy or goals sought, the target groups being served, or the methodology or techniques of such programs.

As one would recognize from reviewing professional literature and hearing professional presentations at various meetings and conferences, there are a good many definitions of career education. For the purpose of this publication, the concept of career education and its operational visibility as identified in a matrix of elements and outcomes developed by The Center for Vocational Technical Education, is accepted as a base point. This particular model emphasizes the concept that career education is a responsibility at all grade levels and in every subject matter area.

The major theme of this publication is that sound planning and management of a systematic in-service delivery system is basic to implementing career education. A format is provided to assist in-service personnel determine the strategy of the in-service effort; the structure of the in-service education program or programs; and the instructional system, including methods, materials, and manpower. This concept is shown in Figure 1. The three-step development shown is as appropriate to a one-time training session as it is to a very complex, long-term effort involving various aspects of the district's personnel and various stages of competency development.

A secondary theme of this publication is that any in-service program dealing with a major change must consider that there is generally a large turnover of personnel within a school system. If it could be assumed that all incoming or newly hired personnel were competent to implement a given curriculum thrust, then the in-service education program could be reduced over a period of years until it was no longer needed. However, the present state of pre-service education provides almost no acquaintanceship with career education. This means that each school can expect most of its newly hired personnel, at least those without prior teaching experience, to have little or no knowledge of career education. Even if they do understand the basics of career education, it is probable that they have little or no real insight into the operational meaning of career education in the classroom.

A third theme is that the career education reform movement should not be viewed primarily as a methodological thrust. It is not solely or even primarily a question of how to train teachers to insert career development concepts into the subject or grade level that they teach. While this will be a major factor in terms of final implementation, it should be obvious to all who have worked with educational personnel that unless they understand why the change is needed, the task cannot be completely accomplished. Therefore, it appears that one of the major in-service (teacher educator) problems is that of creating in every staff member an in-depth understanding of the nature of career education and how it can add meaning and relevance to instruction for all students.

STRATEGIES FOR IN-SERVICE EDUCATION

In-service education begins with development of a strategy including who is to be involved, their needs, and the expected outcomes. This is shown in Figure 1. The strategy may be either short range or long range but accountability begins with defining what is to be accomplished and how it is to be measured.

IN-SERVICE FOR CAREER EDUCATION INVOLVES

MANAGEMENT DECISIONS REGARDING . . .

1. The STRATEGY

Who is to be served – their role, their numbers, their competencies? Is the In-service program one the district will support? What learnings should career education produce for pupils? What are the questions we should ask to decide "Go or No-Go?" When do we expect performance to be operational?

2. The STRUCTURE

What is the time frame for completion?
What is the scope of the effort in terms of definable objectives?
What resources and patterns of in-service instruction will we employ?

3. The SYSTEM

What are the requirements for space and manpower? What methods and media are appropriate? What evaluation system will we use?

With understanding, input, and feedback from the school and community.

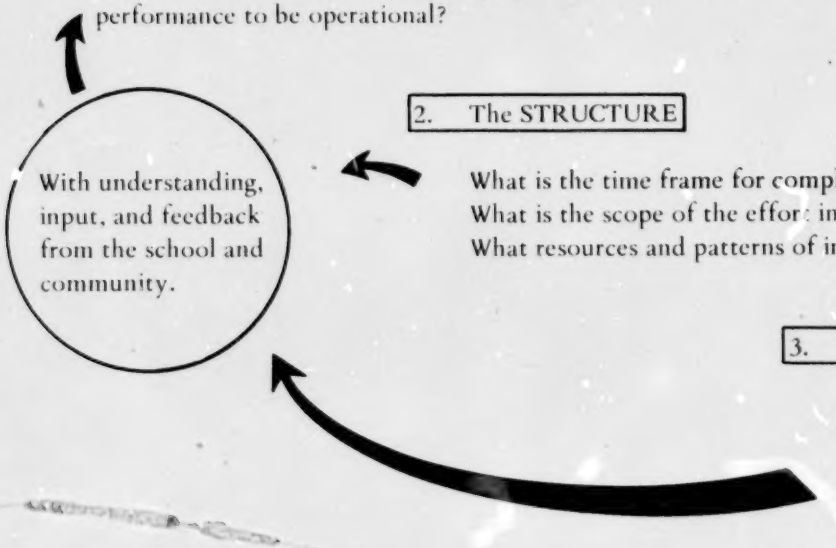

Figure 1. Programming In-service Education For Career Education Is A Management Decision

Developing a strategy means that the school must have in writing a definitive position toward career education and what it wishes to accomplish within the school as well as outside the school. A statement of goals should detail and undergird the broad position statement of support.

District Responsibility for In-service Education

Career education requires major change involving many aspects of the school and community, so the question of in-service education is larger than the school itself. Management must determine early whether or not career education is to be a district-wide program and the level of funding which is to be invested.

There is little doubt that the field of education is the only component of the American business-industrial-governmental structure that generally requires its employees to obtain their own professional upgrading on their own time and at their own expense. This policy might be defended on the basis that since the individual is free to move from one employer to another and is in charge of his own professional development, he bear the cost. However, if a district adopts the concept of career education as a major change, it is asking its employees to retrain and upgrade themselves to carry out the policy.

It is strongly recommended, therefore, that the school assume the cost, including the time of the individual. To do otherwise implies that personnel in the school should use their own time and money whenever the school decides to embark on a shift in educational direction. This is hardly an acceptable or logically supportable position.

Another important decision is determining whether the in-service education program should be organized on a district or building level. Teams of teachers, administrators, and support personnel within a given building can make a program operational for a defined student body and presents a strong argument for this kind of organization. While the building level may seem appropriate for implementation, it should be recognized that the buildings within a district should relate to each other. The subject matter designations which cross building lines are focal points for the implementation of career education objectives. These concerns are particularly relevant after grade six when the offerings tend to be structured into departmental or subject matter areas.

The district should also ask itself whether or not it wishes to be an integral part of a unified, multi-district effort. In some states there are larger or supernumerary districts such as the county organization, encompassing many of the local districts. Where a local district is part of a larger organization, the strategy of the district may be dictated not only by its

internal objectives but also by those with whom it is acting in concert. Career education in many states has become a concept endorsed by the state educational agency and is, therefore, a matter of top priority for educational goal setting for all districts in the state.

Steps in Outlining the Strategy

The first step in strategy development is to identify the target audiences for in-service education. These may be defined by various roles such as:

1) Their line relationship in the school including line administration, classroom instructional staff and support personnel such as librarians and instructional media personnel.

2) Their role as it is related to any kind of departmental offerings such as the social studies department.

3) Their role as they see it in terms of various professional associations to which they belong.

4) Their role as they see it as informal groupings or what may be termed in some fashion, "The Cliques."

Each target group must be defined by contact category and by role. In a sense, the group to which each belongs will determine the psychological set (or attitude) which each brings to the in-service education program. The school's strategy in recognizing the various sets will pay dividends. Any new educational thrust requires the approval of the individuals who are seen by staff as the legitimizers and the approval figures. The function of legitimizing individuals is well documented in the literature on the change process.

The second step in defining the strategy is to develop for each target group a table of the competencies desired. A table outline is shown in Figure 2. The competencies will initially be awareness and understanding, and later, those concerned with operational effectiveness in terms of the role of each individual per his assignment within the school. For example, the teacher as well as the librarian may need to be able to evaluate materials for classroom use, but the administrator may not be required to have any competency in this area. On the other hand, the administrator may require extensive development of his competency in explaining career education to community groups while the teacher may require only a minimum competency in this area. The development of an in-service education program strategy requires a careful outlining of the competencies needed by each target group.

COMPETENCIES

INSTRUCTIONAL PERSONNEL	Understand Career Education Goals	Know Matrix Elements	Apply Concepts & Principles Through Teaching Learning	Create Use of Materials	Provide Student Experiences Leading to Career Awareness	Be Up-to-Date on Concept Requirements of Occupations	Understand Life Styles	Understand the American Enterprise System	Recognize Stages of Career Development	Understand Vocational Education	Be able to Link Man to Grade Concern For
A. Instructional Staff											
A.1 Self-Contained Classrooms or Integrated Classrooms											
A.2 Self-Contained Classroom with Subject Emphasis											
A.3 Subject Oriented (e.g. Upper Middle School) A.3.1 Basic Subjects											
A.3.2 Academic and Vocational											
B. Administration 1. Line 2. Support											
C. Professional Support 1. Counselors 2. Instructional Materials Specialists 3. Aides											
D. Community Appointed Groups											

Figure 2. A Configuration Of Teacher Competence In Career Education Role Within The District

The third step in strategy development involves the question of who will provide planning input. There are two basic questions to be answered:

1) Which target groups can provide information?

2) Which groups will be affected by the in-service program?

When target groups have been identified, the strategy defined, and the strategy outlined, the in-service program can be finalized. A management decision is necessary, to determine whether the program is to be short or long range. It is quite possible that both short and long range goals can be combined into a program statement which includes short range goals for some groups, intermediate goals for others, and long range goals for the entire school. This decision is a part of the first step. At this point, the team devising the strategy must submit the overall plan to those who legitimize it and will support it for the duration of the program.

Development of Broad Competencies

A modified education program for all students, teachers, and administrative personnel requires an in-service program large enough to have significant impact. The economics of the task, a necessary input into management decisions, can be estimated by using the manning table shown in Table 1. This "manning table" shows personnel numbers by target groups, and allows for changes in the school's roster. It is especially important to know the number of new personnel who have joined the school and whether they are trained in career education.

The needs of various school personnel for in-service education appear to be best derived from an analysis of the requirements of an operational career education program and an assessment of what each group of personnel bring to it. It cannot be assumed that the staff has the professional competence to carry out their assigned instructional or administrative function. Some new skills, attitudes, and understandings may be needed.

Career education appears to require several basic competencies:

1) An understanding of the current world of work situation in our technological society including acquaintanceship with the basic occupational cluster approach.

2) An awareness of the cruciality of the job in our society as a basis for economic support for each individual, with an accompanying awareness that job satisfaction is not materialistic but humanistic.

TABLE 1

PROJECTING IN-SERVICE NEEDS: A DISTRICT/BUILDING/DEPARTMENTAL MANNING-TABLE FOR CAREER EDUCATION

TARGET PERSONNEL GROUP & CHARACTERISTICS	NO. FULL TIME	NO. PART TIME	ANNUAL REPLACEMENT	TOTAL PER YEAR
A.				
B.				
C.				
D.				
E.				
F.				
Total number to be trained				

3) Accepting that career education will require very little in terms of new courses or units of instruction, but rather, will require a refocusing of the content of instruction by applying it to real life situations and the developmental needs of youth.

4) Understanding the career development process and how to apply it in teaching situations.

Desired Competence Levels

The strategy involves determination of the level of competence sought by each participant. Specifying this end product becomes the basis for the evaluation which will answer the question, "Did we achieve the goal?" The goal specification step likewise provides input for decisions about the structure of the effort and the kinds of manpower, materials, and media to be employed.

The areas of competence might be:

1) Acquaintanceship with the basic concept of career education, its major subgoals, and its developmental stages.

2) Knowledge of the career education matrix by grade and content area.

3) Acceptance of the need for career education in the school and the community and willingness to serve as a change agent.

4) Operational ability to devise career education objectives suitable to ones role; and to select materials, method, and media appropriate to the objectives.

5) In-depth competence to design, engineer, test and disseminate new strategies and materials for use in the school.

Determination of broad goals such as those above should be followed by specifying them in performance terms for each target participant group (elementary building administrators, secondary faculty, and special education personnel). The involvement of representatives of the user and implementor groups is vital to a realistic appraisal of achievable goals, to modification as the groups move up the scale of competency, and to the evaluation and feedback process as the in-service program progresses.

The user and implementor group representatives will also become the "legitimizers" of the thrust. They probably will emerge as the continuing leadership cadre who posses the capacity and commitment to implement change over the long-term and to sustain the momentum during the inevitable periods of "failure to meet expectations."

The history of large-scale research and development efforts in curriculum reform evidence the need for leadership groups to continually reinforce the teacher or implementor while they face the frustrations of not being able to accomplish all they set out to do. The in-service program must include provisions for meeting such personal needs of the participants. In particular, the classroom teacher who is "on the firing line" must perceive or experience examples of colleague and administrative action which are supportive of the teacher's efforts and which sustain their ego during periods of failure and frustration.

A Final Checklist

The in-service education program begins with the development of a strategy which is an amalgamation of the opinions, concerns, and commitments of the various target groups in the district. These include the governing board, the appointed community groups, the line administrators, and the instructional staffing groups.

If an in-service program is to succeed, the groups, who are responsible for its implementation, must be prepared to answer the following "go or no-go" questions:

1) Over what time span are we willing to commit ourselves to a planned program of curriculum development as well as associated development of professional and community personnel?

2) What amounts of financing will be committed to provide the necessary resources for the in-service programs? What are the sources?

3) To what degree will in-service education be expected as a part of each employee's professional development for an advanced degree?

4) Is our goal that of providing a cadre of leadership personnel and implementers as opposed to bringing all district personnel up to some minimum of competency regarding career education?

5) Will the program operate primarily on the building level, on a subject matter or discipline basis, or be seen as a district-wide endeavor encompassing all levels and subject matter areas?

6) How are we planning to bring all newly hired personnel up to the minimum standard expected in our district in career education prior to the time they enter the classroom or engage in other district responsibilities?

7) To what extent is the district prepared to support increased teacher competence with appropriate instructional resources including materials, media, and needed community experiences by students?

8) Can the district be moved ahead totally and in concert or must the career education thrust be spearheaded by the forward movements of selected groups within selected buildings?

9) Are district personnel sufficiently prepared to carry out the in-service program or must we secure the commitment or help from professional or outside agencies, groups, or consulting organizations?

10) To what degree are we willing to state career education competencies for our personnel in behavioral terms and be willing to hold each person accountable to a minimum standard?

11) Are all groups within the district, including administrators, counselors, instructional personnel, and support personnel, willing to engage to the same degree in the training needed to bring them to a minimum level of competence which is respected by other groups?

12) To what degree is the district willing to have in-service programs led by personnel in the district as opposed to professional employees from outside the district?

13) Will a total in-service program for career education in any way negate the other in-service goals which we have adopted previously and are currently on-going? If so, are we willing to make a fundamental shift in our basic strategy and directions?

14) Do we believe that career education is viable, sufficient for investing in a long term strategy or are we in a position of looking at an immediate problem commitment?

15) Can personnel be released from their assigned duties to act as leaders of the in-service program or do we expect this to be accomplished by additional compensation and commitment of hours outside the regular professional day?

16) Do we have sufficient resource facilities to set up needed in-service training rooms and accompanying collections of professional and instructional materials?

17) Are we as a district willing to set up a sufficient backup system to provide every teacher with a cataloging and indexing system which will provide them with needed instructional materials and media?

18) Is the district willing to back up the in-service program with a district-wide program of public relations and publicity which will engender community support from all groups?

19) If the in-service program uncovers areas of weakness in various subject matter areas and or grade levels, will the district commit itself to the necessary resources to restructure curriculum and instructional materials?

20) Are we committed to the worth of every individual and are we willing to adjust our curriculum as a result of the in-service program to the needs of student and community groups which are classified as minority and disadvantaged?

21) Are we committed to the principle that a job is a crucial aspect of an individual's life in our society and that his education should be responsive to this principle.

22) Can we agree that being prepared for an occupation and being prepared to accomplish its demands is a humanistic act which the school should support?

23) Are we agreed that the resources necessary to deliver common support for career education are equally as important as the competencies of district personnel.

STRUCTURING THE IN-SERVICE EFFORT

After the in-service education program strategy has been finalized and accepted by all legitimizing groups, the management continues devising patterns of activity which will bring about achievement of the goals. At this point, the planners need to determine how clientele are to be recruited and selected, the competencies needed, the timing and sequence of offerings, and the needs and availability of resources.

Encouraging Participation

In our society there is a colloquial saying that "at times you have to entice an individual with a carrot and at other times with a stick." A saying such as this which has withstood the test of time may be equally useful in professional decision making. By analogy, it may be that the in-service career education porgram will be one in which all school personnel are urged to participate. On the other hand, the concept of career education may be such a departure from present practice that staff need to understand and accept its basic mission before they are ready to embark on an intensive in-service program. What is implied, is a need for personnel in the district to determine if some type of short range and easy-to-accept in-service program is needed which will sensitize district personnel to the merits of career education. In other words, there may be a need to "turn-on" personnel before they are ready to engage themselves in an intensive program of staff development.

While the rhetoric of career education is impressive, there will still be many among the administrative and the instructional staff who will demonstrate a "show-me" attitude. Therefore, enthusiasm needs to be generated so as to produce motivation for a longer range plan. The proposition is that the personnel of a district must be inspired to want to invest their time and energy. They must see that this investment will provide a return for them which can be perceived as an attainment of the goals for their own role within the district.

As a corollary, it would be unwise to approach in-service education for career education on the assumption that the whole thing is something that, as Glaser says, "You oughta wanta." Those involved in planning a career education in-service program will do well to recognize the motivations of each group and include them in the strategy of the plan. Experience has shown that involvement in career education is the very best way to convince personnel of the need to make an investment in this curricular reform. Rhetoric may impress—it seldom convinces.

Meeting Teacher Needs

In-service program must meet the perceived needs of those participating. The following questions or statements illustrate the thinking of some school staff:

1) "Career education appears to be a program which provides everyone with a job and an income to spend and is therefore materialistic. I think this conflicts with a humanistic point of view. As a teacher I have well-defined goals within the subject matter and grade that I teach; why should I add something to my curriculum?"

2) "I really cannot see forcing every child to make a career preparation decision in grades 9 or 10."

3) "Yes, I believe that we can implement career education by developing a much stronger guidance program in our junior high school."

4) "I certainly believe in this but we are already doing this in subjects that I teach."

5) "Most of the parents in our district can afford to send their children to college and therefore we do not need career education."

6) "Except for the professions, most training for jobs will be given to a person by the business or industrial employer."

7) "I question whether we should attempt to sell everyone the free enterprise system with all its faults."

8) "If career education will work, then we can solve our welfare and unemployment problems."

9) "I see no need to expand a vocational program so that every individual takes a 'shop' course."

These statements were actually proposed by teachers and administrators regarding career education. While the are only illustrative of opinion, they are significant in that they represent the need of not only answering questions, but of attempting to dissuade individuals from previous conceptualized opinions and positions. As a practical suggestion, it implies that the participants in an in-service program should be assessed, in terms of their belief and value systems regarding career education, before the program is undertaken.

Determining Attitudinal Change

Opinion-polling can assist in setting up the structure of the in-service education program and provide a basis for determining changes in attitude. It should not be forgotten that the introduction of a new curricular concept must be based on the values that personnel hold, and that implementation cannot be achieved unless these values correlate with the final outcomes in terms of student behavioral change.

A sample opinionnaire to survey the value positions and values held is shown in Appendix A. This opinionnaire should be modified to fit the role of individuals in various grades and content disciplines as well as their non-teaching institutional responsibilities.

Determining Program Content

The following competencies deserve consideration by the planning group as they structure the content for the target personnel groups within the school district.

1) Everyone should understand the hierarchal specification of occupations and their relevance to grade levels by being familiar with basic sources such as *The Dictionary of Occupational Titles.*

2) Those involved in career education must be familiar with, and appreciative of, the American system of enterprise and economic system within which the occupational role is performed.

3) Career development is a process of stages and should be well understood as being more than group or individual counseling.

4) Those who have not experienced or observed the scope and diversity of the world of work cannot be expected to relate it in their roles within the district.

5) Career education requires that personnel evidence their regard for the dignity of work as well as their belief in the need for every individual to earn that which is needed for a reasonable standard of living.

6) Career education requires personnel to competently provide in their classrooms world of work applications of their subject matter which support goals for their courses.

7) The goals and processes of vocational education must be understood so that its position in the curriculum can be related to other operational programs within the K-12 program.

8) Career education requires the knowledge by instructional personnel of how they can provide "hands-on" experiences.

9) Competence in evaluation of instructional materials and a knowledge of these will undergird career education at a given grade and content level is requisite to making career education operational.

10) Understanding the career education matrix of performance objectives is fundamental to each individual's decision as to the "fit" within their sphere of operation within the district's program.

11) If career education is to become operational, its broad goals must be understood and acceptable as a mission of the district.

12) Instructional personnel must be competent at selecting materials which achieve career education goals in their grade and content specialization.

13) Instructional personnel should be competent in recognizing interdisciplinary relationships in the achievement of a specified career education goal and be able to eliminate over-lap and duplication of effort.

14) The role of outside agencies and community groups must be specified as to their contribution in providing learning experiences related to a career education objective and the appropriate grade and content area for these learning experiences.

15) Career education must reflect the national economic perspective of the country and, therefore, all who implement it must be grounded in the understanding of the free enterprise system to which this nation is committed.

16) Career education, as a common thrust, is a shared commitment of every educator as well as the parents and the community at large. Each person within a district must see his role through in-service education as a part of a team larger than his own role.

AN INSTRUCTIONAL SYSTEM CASE STUDY

The questions posed earlier reflect the need to make an in-service program a functioning reality. There are many ways to accomplish this goal, and an actual case study may help in demonstrating an approach.

The following example describes a pre-service career education module for seniors at Michigan State University. It is presented as a model for the design of an in-service program which could be used with newly-employed teachers during the summer preceeding their first year.

The Setting

The module involves elementary and secondary majors who have completed student teaching and are enrolled in a course called "School and Society." The focus of the course deals with social issues relating to education. Each student enrolls in several modules, one of which is entitled "Career Education." The strategy of this module is that of learning by discovery; that is, (1) finding out about career education by observing it in operation, (2) learning what the terminology of career education actually means as well as seeing the career education matrix in perspective, (3) identifying the meaning of the career education concept through its application to a given classroom situation, and (4) by inviting the future teacher to identify how career education can be a viable concept within his value system.

The module is based on the assumption that each enrollee is familiar with career education but wishes to view it as a possible answer to the role of the school in solving a social problem. In terms of the strategy behind this module, the seniors enrolled are assumed to be typical of the new teachers being hired.

The Program Structure

The module operates for a total of 18 clock-hours including three, three-hour group sessions, plus nine clock-hours of outside independent work. This total of 18 hours is quite typical of in-service education courses. Each pre-service trainee is given a notebook containing a statement of requirements, the instrument for evaluating instructional materials and a training manual, and a set of basic papers. They are:

1) Rinehart, Bruce, "A Comprehensive Career Education Model: A Bridge Between School and Work." Presented to the Southwest Research Coordinating Council (Clearwater, Florida, May 16, 1972) 17 pp. ED 065 690 MF $0.65 HC $3.29.

2) Kruger, Daniel H., *Manpower Problems and the Business Community.* East Lansing: School of Labor and Industrial Relations, Michigan State University. 1972.

The initial session is an orientation to career education and the requirements of the pre-service training program. Values and opinions about career education of each enrollee are assessed by means of a survey instrument shown in Appendix A. This session enables each enrollee to present his points of view about the need for orientation and training for the world of work for students in his subject matter area.

The second session involves training each enrollee to make an assessment of instructional materials using the prescribed evaluation instrument and accompanying evaluation material. Two trial runs are held by the instructor. During the third session each enrollee is asked to present his point of view regarding the question, "Is Career Education Viable?" At the beginning of this summary session, each enrollee completes a post-test questionnaire to determine the degree to which his values or opinions about career education have changed during the course of the training session.

The assessment instrument used in this training is an adaptation of instruments developed in two national materials evaluation projects (*A First Step . . .*, 1972; *Vocational Education . . .*, 1971). The instrument was developed by these national projects to provide evaluative criteria for public school as well as commercial instructional materials and to provide a computer-based indexing and classification print-out system.

The instrument shown in Appendix B has been reworked to provide a closer identification with the role of the classroom teacher in materials assessment. On the basis of its use in pre-service teacher education at Michigan State University, it appears that further adaptation is desirable to accomodate each classroom teacher's subject matter and grade level point of view.

The training program presented can be the subject of a considerable experimental research in which the change or shift of values and opinions of the trainees are measured on a pre-test and post-test basis. Analysis factors could include such things as the amount and breadth of occupational experience, the subject matter emphasis, sex, age, and personality

factors. A further research element can be introduced in which this learning by discovery method is contrasted to a control group subjected to a standard program of lectures and readings. Also, the results of this methodology on pre-service teacher trainees could be contrasted with those in administration and teaching with varying amounts of professional educational experience.

Feedback and Evaluation

The basic evaluation of the module is in terms of an opinionnaire administered as a post-test. Outcomes are measured in terms of shifts in direction on items from a similar instrument administered at the beginning of the module. Feedback is also obtained by having each participant prepare a three-page paper entitled, "Is Career Education Viable?" The position papers provide an excellent basis for analyzing the professional point of view in terms of the totality of the concept as it is understood following the module, and in terms of the subject matter and grade level of the individual preparing the paper. Results of these two forms of evaluation indicate that learning by the discovery approach indeed produces an understanding of the basic approach embodied in the career education concept, and an understanding of the terminology of the matrix.

SUMMARY

In summary, development of an in-service career education program requires sound planning and management to increase the likelihood of success. Those responsible for program development must not forget that there is a high turn-over of personnel in most schools, constantly bringing in persons with little or no background in career education. Therefore, one of the major problems of in-service teacher education is developing an indepth understanding of career education within each staff member and identifying its implications for student instruction.

Because career education touches virtually every aspect of the school and most of the community, it requires a much larger in-service education effort than most other educational innovations. Career education in-service teacher education requires management decisions regarding:

1) The Strategy—who will be involved, the degree of involvement, and what are the primary goals.

2) The Structure–time frames, program scope, and resources and patterns of instruction.

3) The System–space and manpower requirements, methods and media employed, and evaluation techniques.

This requires the very best management techniques utilizing input from all aspects of the school and community.

APPENDIX A

An Attitudes Survey to
Assess Beliefs Toward Career Education*

A. PERSONAL INFORMATION

1. Student Number (last 3 digits only) ____
2. Approximate Grade Point Average ____
3. Marital Status: single ____ married ____ ages of children ____
4. Male ____ Female ____ 5. Age (Nearest birthday) ____yrs.
6. Student teaching completed, Yes ____ No ____ Grade Level ____
   Subject Area ____
   Current teaching position ____
7. Types of Occupational Experience:

Job Title & Duties (e.g. Clerk-general office duties)	Duration (wks) & Time (full, 3/4, 1/2, 1/4) (e.g., 1 yr. – 1/2 time)
____	____
____	____
____	____
____	____

8. Have you received any kind of vocational education or training. Yes ____
   No ____ If Yes, indicate type of training ____
   ____
9. Type of High School program you were in. Academic ____; General ____;
   Vocational ____; Business ____; Other ____
   ____(Describe)
10. Predominent type of community in which you grew up. Metropolitan Core: ____ (one or more adjacent cities with a population of 50,000 or more which served as the economic focal point of these environs); City: ____ (community of 10,000 to 50,000 that serves as the economic focal point of its environs); Town: ____ (community of 2,500 to 10,000 that serves as the economic focal point of its environs); Urban Fringe: ____ (a community of any population size that has as its economic focal point a metropolitan core or a city); Rural: ____ (a community of less than 2,500).

*Developed by Cornelius Sullivan, EPDA fellow in Vocational Education, Michigan State University.

11. The size of your high school graduating class was: less than 100 ____; 100-199 ____; 200-299 ____; 300 or more ____.
12. What is your racial derivation?_____
13. Please place an "X" in the space corresponding to the income range which most closely approximates that of the home in which you were raised.
    A. Under $4,000 ____; B. $4,000 to $5,999 ____; C. $6,000 to $7,999 ____; D. $8,000 to $9,999 ____; E. $10,000 to $14,999 ____; F. $15,000 and over ____.
14. Indicate the types of experience you have had with children, other than teaching
    _____
    _____
    _____

B. Place an "X" in the spaces which correspond to the item or items which describe the subject.
    1. Career Education is: (a) a major modification of our current education system which deals with what is wrong with the way in which youth move from school to work, (b) an idea for helping to make school curricula realistic, by unifying fragmented programs, (c) a way of providing useful education for all students, whether they plan to enter the world of work or to continue their education, (d) a means of building a bridge between school and work for both youth and adults, (e) all of these.
       (a) ____, (b) ____, (c) ____, (d) ____, (e) ____.
    2. Vocational Education is: (a) training for employment, (b) career education, (c) a part of career education, (d) includes career education, (e) none of these.
       (a) ____, (b) ____, (c) ____, (d) ____, (e) ____.

C. Indicate the order in which you feel the items following the statements should occur. Begin with the number 1 (one) for the earliest and consecutively number each item.
    1. The following are stages of an individual's career development from early childhood to adult life.
       ____ (a) orientation to occupational clusters (jobs) and associated life style.
       ____ (b) preparation to employability level and for some, preparation for career or advancement.
       ____ (c) simple economic awareness of "people at work."
       ____ (d) in-depth occupational exploration and associated development of cluster core skill and knowledge.
       ____ (e) self-awareness related to occupational exploration experience with "people, data, and things."

2. The stages of Career Education are referred to as:
   ____ (a) career exploration
   ____ (b) career preparation
   ____ (c) career awareness

D. Indicate whether you think the following statements are true or false by placing "T" – true or "F" – false in the space to the left of the statements.

____ 1. The teenage unemployment rate in this country is the highest of any western nation.
____ 2. For black teenagers, the unemployment rate approximates one out of three.
____ 3. Nearly all students leave school in the United States each year with adequate preparation for careers.
____ 4. Over 30% of the elementary and secondary school students in the United States become dropouts.
____ 5. Many of the dropouts consider school to be irrelevant.
____ 6. General curriculum high school students who graduate are well prepared for their future endeavors.
____ 7. A large number of students who enter college or specialized training programs do not graduate or complete their training.
____ 8. The Federal Government has been spending large sums of money in manpower programs for youth unable to find their place in the labor market.
____ 9. Employers, especially those in large-scale industries, are usually willing to hire youth under 21 years.
____ 10. Our schools, as they exist today, have demonstrated their ability to prepare individuals for life's role.
____ 11. A person normally spends most of his life pursuing a career.
____ 12. Career education is the same as vocational education.
____ 13. Career education relates all education to the world of work.
____ 14. Career development is a life-long process.
____ 15. Elementary teachers need not be concerned with career education.
____ 16. Career education places limits on the educational and occupational options of individuals.
____ 17. Career education places low emphasis on intellectual pursuits.
____ 18. Career education's objectives are the preparation for and the development of a life-long productive career.
____ 19. Career education excludes preparation for professional careers such as those in medicine, engineering or education.
____ 20. There is satisfaction among leading educators with the public schools as they presently are operating.

____ 21. Career education encompasses all types of education.

____ 22. Vocational educators have the primary responsibility for career education.

____ 23. Implementation of career education requires a revision of the complete instructional program.

____ 24. Career education places emphasis upon an early selection of a life-long career.

____ 25. Teachers at every level have a meaningful role in the career education concept.

E. Rate your reaction to the statement according to how you perceive it or feel towards it at the moment by placing an "X" somewhere along each of the seven point scales from strongly agree SA to strongly disagree SD. Space is provided at the end of this section for any comments you may feel are appropriate to make concerning any of the statements.

1. Career choice is being forced upon youth at too early an age.
   SA ____: ____: ____: ____: ____: ____: ____ SD
2. The subjects and grade levels at which I teach or will be teaching can contribute toward a students career goal.
   SA ____: ____: ____: ____: ____: ____: ____ SD
3. For most students a career choice should be made by the tenth grade.
   SA ____: ____: ____: ____: ____: ____: ____ SD
4. Students whose families can provide their support after high school can afford to postpone their career choice.
   SA ____: ____: ____: ____: ____: ____: ____ SD
5. The present curriculum in our schools to quote a noted educator is "neither fish nor fowl, neither truly vocational nor truly academic . . .," therefore we should modify it.
   SA ____: ____: ____: ____: ____: ____: ____ SD
6. Most of the influential elements of our society have been guilty of promoting the idea that the only good education is an education capped by a college degree.
   SA ____: ____: ____: ____: ____: ____: ____SD
7. This idea expressed in the previous statement (no. 6) has been transmitted by our values, our aspirations and our silent support. It is snobbish, undemocratic, and a revelation of why schools fail so many students.
   SA ____: ____: ____: ____: ____: ____: ____ SD
8. Our education has not been spaced out to periods which are more timely for its use thus causing an unrealistic separation of school from work.
   SA ____: ____: ____: ____: ____: ____: ____ SD
9. Schools are irrelevant to the real world for most students.
   SA ____: ____: ____: ____: ____: ____: ____ SD

10. Our schools have long faced the dilemma which results from the disparities between the basic objectives and programs of the schools and the concerns, problems, needs, and aspirations of the youth who are in attendance.
    SA ____: ____: ____: ____: ____: ____: ____ SD
11. The instructional programs within our schools are related specifically to the needs of the academically able students.
    SA ____: ____: ____: ____: ____: ____: ____ SD
12. Children are permitted to move through the educational system without showing any substantial gains in knowledge or skill from the academic subject matter to which they are subjected.
    SA ____: ____: ____: ____: ____: ____: ____ SD
13. The compartmentalized curriculum does not necessitate the student's application of the knowledge outside of the classroom.
    SA ____: ____: ____: ____: ____: ____: ____ SD
14. Educators have failed to develop truly viable individualized programs and instructional strategies.
    SA ____: ____: ____: ____: ____: ____: ____ SD
15. Educators have never succeeded in adapting programs of instruction to the socio-economic, cultural and ethnic differences of children.
    SA ____: ____: ____: ____: ____: ____: ____ SD
16. Contemporary schools emphasize the custodial functions of maintaining discipline and control of the school at the expense of its educational functions.
    SA ____: ____: ____: ____: ____: ____: ____ SD
17. True legitimization has never been given to any educational programs other than the college preparatory.
    SA ____: ____: ____: ____: ____: ____: ____ SD

Note: Please indicate below any comments, reactions, or questions you may wish to state.

_____

_____

_____

APPENDIX B

An Instrument to Assist District Personnel in Evaluating Materials
for Career Education and in the Process, Learning by Discovery.
(Adapted by the author from *A First Step . . .*, 1972; and *Vocational Education . . .*, 1971).

1. TASK 1.0 Identify—What Is It?

TITLE _____

_____

AUTHOR _____

SOURCE _____

_____

DATE _____

1.1 BASIC TYPE

___ Commercial Items
___ Free for asking
___ Curriculum Guide
___ Professional Back-Up & Support Item

1.2 PRINTED

___ A. Instructional Guide/Manual
___ B. Teaching Guide/Manual
___ C. Curriculum Guide
___ D. Program Planning Guide
___ E. Unit of Study (study fields)
___ F. Instructional Module
___ G. Student Workbook
___ H. Student Manual
___ I. Laboratory/Practice Manual
___ J. Textbook/Workbook
___ K. Simulation/Environmental Situation
___ L. Evaluation Instruments
___ M. Administrative Materials
___ N. Bibliographies
___ O. Directories
___ P. Supplementary Reference Materials
___ R. Textbook
___ S. Other: _____

1.2.2 FILM

___ 1. Films
___ 2. Filmstrips
___ 3. Cassettes
___ 4. Videotapes
___ 5. Slides
___ 6. Slide-Tapes

1.2.3 MANIPULATIVE MATERIALS

___ A. Puzzles
___ B. Laboratory Kits
___ C. Puppets/Dolls/Figures
___ D. Activity Kits

___ E. Tools & Related Items
___ F. Games
___ G. Blocks & Related Items
___ H. Rods/Counters/etc.
___ I. Other: _____

1.2.4 AUDIO-VISUAL MATERIALS

___ 1. Records, Discs
___ 2. Audio Tapes
___ 3. Transparencies
___ 4. Models/Mock-Ups
___ 5. Flat Pictures
___ 6. Posters
___ 7. Charts & Graphs
___ 8. Single Concept Loops
___ 9. Other: _____

II. TASK 2.0—Where Does It Fit in Career Ed?

2.1 GRADE LEVEL

___ A. K
___ B. 1
___ C. 2
___ D. 3
___ E. 4
___ F. 5
___ G. 6
___ H. 7
___ I. 8
___ J. 9
___ K. A (10)
___ L. B (11)
___ M. C (12)

2.2 STRAND OF EMPHASIS

___ A. Simple economic awareness of "people at work"
___ B. Orientation to occupational clusters (jobs) & associated life styles
___ C. Self-awareness related to occupational exploration experience with "people, data and things"
___ D. In-depth occupational exploration and associated development of cluster core skills and knowledge
___ E. Preparation to employability level and for some, preparation for career advance

2.3 CONTENT AREA

___ A. Language Arts
___ B. Mathematics
___ C. Sciences
___ D. Social Sciences
___ E. Fine Arts
___ F. Health/Physical Education
___ G. Career Education
___ H. Agriculture/Natural Resources
___ I. Office Education
___ J. Distributive Education/Marketing
___ K. Health Occupations
___ L. Home Economics Education

____ M. Industrial Education
____ N. Consumer Education
____ O. Industrial Arts
____ P. Vocational Education (general)
____ Q. Business Education (general)
____ R. Data Processing
____ S. Recreation
____ U. Technical Education

2.4 MAIN THRUST

2.4.1 K-3

____ A. Goods (Supplies)
____ B. Services

2.4.2 4-6

____ A. Industry
____ B. Commerce
____ C. Social Sciences
____ D. Services
____ E. Arts (Humanities)

2.4.3 7-12

____ A. Natural Resources
____ B. Construction (Construction Process)
____ C. Manufacturing
____ U. Transportation
____ V. Communication
____ W. Trade (Marketing)
____ X. Finance (Banking)
____ F. Government (Admin. Body)
____ G. Education
____ Y. Health
____ Z. Welfare
____ I. Personal (Human) Services
____ J. Product Services
____ K. Arts & Humanities (Humanities)
____ L. Recreation & Entertainment (Recreation)
____ M. All of the above

2.5 GROUP WHO WILL USE

____ 1. Students
____ 2. Instructional Personnel
____ 3. Non-Instructional Personnel
____ 4. Parents
____ 5. Community at Large
____ 6. Other: _____

2.6 WHAT CAREER ELEMENT WILL IT ACHIEVE?

2.6.1 EDUCATIONAL AWARENESS

____ 1.1 The student will recognize that learning is a continuous process that occurs both in school as well as outside of school.

____ 1.2 The student will recognize that his educational experiences are a part of his total career education and development.

____ 1.3 The student will recognize that various career directions are related to different types of educational preparation.

____ 1.4 The student will recognize the significance of education (i.e., the development of language, computational and reasoning skills and mastery of content knowledge) as a primary means of achieving career and life goals.

2.6.2 SELF AWARENESS

____ 2.1 The student will come to recognize the relationships of his interests, aptitudes, and achievements to realization of his career aspirations.

____ 2.2 The student will understand and use the concept of "role" as a way of learning about himself in relation to his culture.

____ 2.3 The student will, through coming to know himself, learn to understand, accept and respect his own uniqueness both in terms of his past development and as changes occur in him as a result of learning, growth and maturation.

____ 2.4 The student will come to understand and recognize the forces in his environment that influence his development (i.e., social, economic, educational, cultural, etc.)

____ 2.5 The student will recognize that self-knowledge is related to a set or system of values that are unique to him and relate to his being able to make choices and implement those choices with personal commitment.

____ 2.6 The student will learn the importance of establishing (although tentative) personally relevant goals based upon an understanding of himself.

2.6.3 ATTITUDES AND APPRECIATIONS

____ 3.1 The student will recognize that once a task or job is accepted there are certain responsibilities to himself and others.

____ 3.2 The student will recognize differences in others and will develop tolerance and flexibility in his interpersonal relationships.

2.6.4 DECISION MAKING

____ 4.1 The student will understand the nature of decision making and recognize the importance of his acting responsibly in making choices.

____ 4.2 The student will be able to identify and state personal (career) goals as part of the process related to making decisions (related to career).

____ 4.3 The student will become proficient in the process of identifying, gathering and using resource information as part of the process of making decisions (related to career).

____ 4.4 The student will recognize that the decision making process involved identifying alternatives and selecting the one that is regarded by him as most appropriate.

2.6.5 CAREER AWARENESS

____ 5.1 The student will understand the variety and complexity of occupations and possible careers associated with the world of work.

____ 5.2 The student will understand the way in which occupations and careers relate to the goals, needs and functions of the society.

____ 5.3 The student will be able to determine the basic characteristics and qualifications related to preparation for and performance of the major tasks associated with various occupational roles.

____ 5.4 The student will understand that "career" involves progression through stages of preparation for and the performance of occupational roles and may involve a change in basic vocational direction.

____ 5.5 The student will understand the relationship between an individual's career and his overall life style.

2.6.6 ECONOMIC AWARENESS

____ 6.1 The student will understand the relationship between various occupational roles and related personal economics and life style.

____ 6.2 The student will understand the range of social and economic benefits, associated with various occupational roles and careers, that are acquired in addition to one's actual salary or pay.

____ 6.3 The student will understand how economic wealth is accumulated by means other than those related directly to most occupations or careers (i.e. investments, interests, insurance, savings, etc.) and how these may influence his career and life style.

____ 6.4 The student will be able to effectively relate his present and anticipated economic status to the economic status of the Nation, his State and community and understand the possible effects various trends and changes may have on his status.

2.6.7 BEGINNING COMPETENCY

____ 7.1 The student will develop the planning and process skills required to identify the objectives of a task, specify the resources required, outline the steps necessary to complete the task, perform the actual operations and evaluate the final product.

____ 7.2 The student will develop an understanding of the material used and processes associated with business, commercial and industrial activity, and production and will be competent in the use of the basic tools, equipment and materials associated with carrying out those processes.

____ 7.3 The student will develop understanding of the fundamental types of interpersonal relationships generated as a result of the interaction of various occupational and career roles (i.e. employer, employee, supervisor, worker, associate, professional, para professional, etc.)

____ 7.4 The student will develop the educational and occupational competency regarded as basic and important to moving on to the next stage of preparation for and/or entry into the career of his interest.

____ 7.5 The student will develop the required entry level or in-depths skills appropriate for gainful employment in an area of occupational interest.

2.6.8 EMPLOYABILITY SKILLS

____ 8.1 The student will recognize and understand the advantage and responsibilities associated with working independently, as a member of a cooperative team and/or in being supervised or directed.

____ 8.2 The student will through his educational experiences, especially in those areas that relate to career preparation, develop the basic work habits regarded as necessary for successful performance of the basic tasks related to the occupation and career of his choice.

____ 8.3 The student will be able to relate information about his interests, aptitudes and qualifications to his selecting, learning and/or performing duties or occupational roles assigned to, or chosen by him.

III. TASK 3.0- What Learning Outcomes will It Produce?

3.1 Objective(s): State in learning behavior: (1) _____

_____

_____

_____

(2) _____

_____

_____

_____

3.2 How Used to Implement the Objective(s)?

____ Means of showing how content is used in an occupation
____ Gives student practice in applying content to an occupational problem
____ Provides new content for all students
____ Restates content in a different way
____ Gives group practice/learning
____ Gives individual the opportunity to learn/practice
____ Provides new content for individual student needs

IV. TASK 4.0- What Does It Involve As Special Conditions For Use

4.1 SPECIAL REQUIREMENTS

4.1.1 EQUIPMENT & FACILITIES

____ (Not Applicable)
____ 1. Open space, multiple group
____ 2. Special facilities
____ 3. Special equipment
____ 4. Special transportation
____ 5. Other: _____

4.1.2 PERSONNEL AND STAFFING

____ (Not Applicable)
____ A. Team teaching
____ B. Differentiated staffing
____ C. Low pupil-teacher ratio
____ D. Paraprofessional support
____ E. Peer student support
____ F. Special support personnel
____ G. Specially trained instructor
____ H. Other: _____

4.1.3 SCHEDULING & ORGANIZATIC

____ (Not Applicable)
____ 1. Unique grade organization
____ 2. Outside normal day/year
____ 3. Modular or flexible schedule
____ 4. Community organization based classroom
____ 5. Industry based classroom
____ 6. Business based classroom
____ 7. Other: _____

4.1.4 COMMUNITY RESOURCES

____ (Not Applicable)
____ 1. Volunteer support, general or specific
____ 2. Industry/business instructors
____ 3. Community agency support
____ 4. Work experience stations
____ 5. Other: _____

4.1.5 PERSONNEL FACTORS

Could a staff member use the item without training?
____ Yes
____ No
If no, what area of training is needed?

_____
_____

4.1.6 SPECIAL LEARNING CONDITIONS

Is the item directly aimed at a student with a special learning need?
____ Yes
____ No

____ 1. Reading disability
____ 2. Visual handicap
____ 3. Aural handicap
____ 4. Ethnic group
____ 5. Over-age
____ 6. Other: _____

4.2 DESCRIPTORS

____ Not Applicable
____ A. Pre-test
____ B. Post-test
____ C. Systematic program of evaluation
____ D. Criterion referenced tests
____ E. Outline of content activities
____ F. Teaching suggestions
____ G. Alternative learning/teaching activities
____ H. Suggested resources
____ I. Bibliography
____ J. Sample student materials
____ K. Guidance materials
____ L. In-service training program
____ M. State relationships to other areas of the curriculum

____ N. Provisions for individualized, small group, large group instruction

____ O. Out-of-school as well as in-school experiences

____ P. Goals and objectives for learners

____ Q. Statement of desired entry level competencies of the learner

____ R. Program organization and administration guidelines

____ S. Suggested community relations and community agency support programs, which may include parent education

____ T. Student use materials, e.g., workbooks, sample forms, tests, etc.

____ V. Other: _____

V. TASK 5.0–WHO SHOULD USE IT & WHEN?

5.1 RECOMMENDATIONS: _____

_____

_____

_____

_____

_____

_____

ASSESSOR: _____ DATE: _____

BIBLIOGRAPHY [1]

A Cooperative Developmental Workshop for Career Education in Lancaster County. Final Report. New Holland, PA: Eastern Lancaster School District. 1972. 77 pp. ED 072 236 MF $0.65 HC $3.29.

A First Step Toward Career Education. A Project to Identify, Compile, Catalog, Analyze and Assess Past and Present Career Education Efforts to Support Comprehensive Career Education Model I Objectives. Volume I and Volume II–Appendices. Scottsdale, AZ: Palo Alto Educational Systems, Incorporated. 1972. 251 pp. ED 060 224 MF $0.65 HC $9.87.

Budke, Wesley E. *Review and Synthesis of Information on Occupational Exploration.* Information Series No. 34. Columbus, OH: The Center for Vocational and Technical Education, The Ohio State University. 1971. 86 pp. ED 056 165 MF $0.65 HC $3.29. Also available from the Government Printing Office, $0.55.

Career Education: A Handbook for Implementation. Baltimore: Maryland State Department of Education. February, 1972. 102 pp. ED 062 251 MF $0.65 HC $6.58. Also available from the Government Printing Office, Catalog N. HE5.6/2:c18, $0.55.

Elfinbein, Iris M. *Performance-Based Teacher Education Programs: A Comparative Description.* Washington, DC: American Association of Colleges for Teacher Education. 1972. 121 pp. ED 067 390 MF $0.65 HC $6.58.

Goldhammer, Keith, and Robert E. Taylor. *Career Education: Perspective and Promise.* Columbus, OH: Charles E. Merrill Publishing Company. 1972. 300 pp. ED 064 517, document not available from EDRS.

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[1] Bibliographical entries followed by an ED number are generally available in hard copy or microfische through the Educational Resources Information Center (ERIC). This availability is indicated by the abbreviations MF for Microfische and HC for hard copy. Order from ERIC Document Reproduction Service (EDRS), P.O. Drawer O, Bethesda, Maryland 20014. Payment must accompany orders totaling less than $10. Documents available from the Government Printing Office may be obtained from the Superintendent of Documents, Government Printing Office, Washington, DC 20402.

Herr, Edwin L. *Review and Synthesis of Foundations for Career Education.* Preliminary Edition. Information Series No. 61. Columbus, OH: The Center for Vocational and Technical Education, The Ohio State University. 1972. 85 pp. ED 059 402 MF $0.65 HC $3.29.

Hoppock, Robert and Bernard. "The Occupational Information Consultant: A New Profession?" *The Personnel and Guidance Journal.* Vol. 49, No. 7 (March, 1971), 555-558.

Introducing Career Education to Teachers: A Handbook for Consultants, Workshop Leaders, and Teacher Educators. DeKalb, IL: Northern Illinois University, Vocational and Technical Education Division. Illinois State Board of Vocational Education and Rehabilitation. 1972. 108 pp. ED 067 487 MF $0.65 HC $6.58.

Kruger, Daniel H. *Manpower Problems and the Business Community.* East Lansing: School of Labor and Industrial Relations, Michigan State University, 1972.

Mathieson, Moira B. *An Abstract Bibliography of Teacher Education Programs.* Part I of the ERIC Clearinghouse on Teacher Education Project on Career Education. Washington, DC: ERIC Clearinghouse on Teacher Education. October, 1972. 92 pp. ED 067 382 MF $0.65 HC $3.29.

"Models of Staff Development–I." *Theory Into Practice.* Vol. II, No. 4 (October, 1972), entire issue.

"Models of Staff Development–II." *Theory Into Practice.* Vol. II, No. 5 (December, 1972), entire issue.

Norton, Robert E. "In-Service Education: Vital to Career Education Delivery." Paper presented at the American Vocational Association Convention (Chicago, December 3, 1972). Columbus, OH: The Center for Vocational and Technical Education, The Ohio State University. 23 pp. ED 073 264 MF $0.65 HC $3.29.

Rinehart, Bruce. "A Comprehensive Career Education Model: A Bridge Between School and Work." Presented to the Southwest Research Coordinating Council (Clearwater, Florida, May 16, 1972). 17 pp. ED 065 690 MF $0.65 HC $3.29.

Rubin, Louis J., ed. *Improving In-Service Education: Proposals and Procedures for Change.* Boston: Allyn and Bacon, Inc. 1971. 284 pp. ED 052 154, document not available from EDRS.

Schaefer, Carl J., and Ward, Darrell L. *A Model for a Comprehensive State Personnel Development System in Vocational Education.* Final Report. Presentation of a staff paper of the 1971 National Leadership Development Seminar for State Directors of Vocational Education. Leadership Training Series No. 37. Columbus, OH: The Center for Vocational and Technical Education, The Ohio State University, January, 1973. 48 pp. ED 068 624 MF $0.65 HC $3.29.

Schmitt, Henry F. *Teacher Education for the Culturally Different.* Appendix C of a Final Report. Columbus, OH: The Center for Vocational and Technical Education, The Ohio State University, January, 1973. 38 pp. ED 072 207 MF $0.65 HC $3.29.

Search and Assessment of Commercial Career Education Materials. Final Report. Chicago: Peat, Marwick, Mitchell, and Company. 1973.

Vocational Education and the Profession in the 70's and Beyond. Washington, DC: National Education Association Task Force on Vocational Education. May 26, 1971. 24 pp. VT 016 173, MF available in VT-ERIC Set ED 070 816.

Wall, James E., and Shill, James F. *Teacher In-Service Training for Career Education Projects in Mississippi.* Final Report. State College, MS: Research Coordinating Unit for Vocational-Technical Education. 1972. 34 pp. ED 073 290 MF $0.65 HC $3.29.

The mission of the ERIC CLEARINGHOUSE ON VOCATIONAL AND TECHNICAL EDUCATION is to acquire, process, and disseminate research and related information and instructional materials on vocational and technical education and related fields. It is linked to the Educational Resources Information Center (ERIC), the national information system for education.

PRODUCTS

The information in the ERIC system is made available to users through several information access products. Documents and journal articles are acquired, selected, abstracted, indexed, and prepared for announcement in these publications. The document's abstract can be read in the same ERIC publication in which it is indexed. The full text of announced documents is available from the original source or from the ERIC Document Reproduction Service (EDRS) in microfiche and hard copy form.

- ABSTRACTS OF INSTRUCTIONAL MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION (AIM), a quarterly publication, provides indexes to and abstracts of a variety of instructional materials intended primarily for teacher or student use.
- ABSTRACTS OF RESEARCH MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION (ARM) is published quarterly and provides indexes to and abstracts of research and related materials.
- COMPUTER TAPES of AIM and ARM contain resumes of over 6,000 documents on vocational and technical education that have not appeared in RIE.
- RESEARCH IN EDUCATION (RIE) and CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE) are monthly publications. Many of the documents announced in AIM and ARM are also listed in RIE, the Central ERIC publication. Journal articles reviewed by the Clearinghouse are announced in CIJE, the CCM Corporation publication.

CAREER EDUCATION

A new project, the Supportive Information for the Comprehensive Career Education Model (SI/CCEM), is using the ERIC document base to provide information for the development of the Comprehensive Career Education Model (CCEM). In addition to using ERIC, the project staff is helping to acquire additional materials for CCEM. Many of these are being announced in AIM, ARM, and RIE.

INFORMATION ANALYSIS

The Clearinghouse engages in extensive information analysis activities designed to review, analyze, synthesize, and interpret the literature on topics of critical importance to vocational and technical education. Review and synthesis papers have been prepared on many problems or processes of interest to the entire field. Current emphasis is upon interpretation of major concepts in the literature for specific audiences. Recent career education publications have been developed that clarify and synthesize for program developers and decision-makers the theoretical, philosophical, and historical bases for career education.

USER SERVICES

In order to provide information on ways of utilizing effectively the ERIC document base, the Clearinghouse provides the following user services:

1. Information on the location of ERIC microfiche collections;
2. Information on how to order ERIC access products (AIM, ARM, RIE, and CIJE);
3. Bibliographies on timely vocational-technical and related topics such as (1) career education, (2) vocational education leadership development, (3) vocational education for disadvantaged groups, (4) correctional institutions, (5) cooperative vocational education, (6) information system for vocational decisions, and (7) management systems in vocational education;
4. Brochures describing ERIC operations and products;
5. Directing users to sources of information required for solving specific problems; and
6. Referral of requests to agencies that can provide special services.

YOUR INPUTS

Your comments, suggestions, and questions are always welcomed at the Clearinghouse. In addition, any documents you feel are beneficial to educators may be sent to the Clearinghouse for possible selection and inclusion into AIM, ARM, or RIE.

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DESCRIPTORS—*Career Education; *In-service Teacher Education; *In-service Programs; *Management; Decision Making; Educational Change; *Educational Strategies; Instructional Systems; Program Planning.

ABSTRACT—Career Education poses a challenge for in-service education and requires management decision making from all the discipline areas and teaching levels. The major theme of this paper is that sound planning and management of a systematic in-service delivery system is basic to implementing career education. A planning format is presented for use in determining the strategy of the in-service effort, the structure of the program to be presented, and the instructional system which supports the effort. The second theme of the paper is that any in-service program dealing with a major change must consider that each school system generally has a large turnover of personnel, who may have little or no knowledge of career education or insight into its operational meaning. A third theme concerns the need to create an indepth understanding of the nature of career education and how it can add meaning and relevance to instruction. Steps in the strategy for in-service education are outlined, with a strong recommendation that the school district assume the cost of the professional retraining for the major policy change inherent in the career education concept. A case study of a preservice career education module is presented as a model for the design of an in-service program. Appended are instruments to assist district personnel in evaluating materials for career education and an attitudes survey to assess beliefs toward career education.